UTILITY PATENT APPLICATION TRANSMITTAL (Large Entity) (Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No. 003449.0012

Total Pages in this Submission

TO THE ASSISTANT COMMISSIONER FOR PATENTS

**Box Patent Application** Washington, D.C. 20231

			<u>α</u> ,
Transmitted herewith for filing under 35 U.S.C.	111(a) and 37 C.F.R.	1.53(b) is a new utility patent	application for an
invention entitled:	` ,	• • • • • • • • • • • • • • • • • • • •	TO.
mryCittori Cittatica.			•

Vhich is a:  Continuation Divisional Continuation-in-part (CIP) of prior application No.:  Vhich is a:		ntitle		nosita Star	hir we						<del></del>
Michael A. O'Neill, Paul Trudeau, Wayne D. Kirk, Jonathan W. Bremmer and Stuart C. Simmons    Continuation   Divisional   Continuation-in-part (CIP) of prior application No.:	A Fiber-	·Keini	orcea Com	iposite Struct	ture		·				
Michael A. O'Neill, Paul Trudeau, Wayne D. Kirk, Jonathan W. Bremmer and Stuart C. Simmons    Continuation   Divisional   Continuation-in-part (CIP) of prior application No.:	ınd invente	ed by	:							•	
□ Continuation       ☑ Divisional       □ Continuation-in-part (CIP)       of prior application No.:       09/690,338         Which is a:       □ Continuation       □ Divisional       □ Continuation-in-part (CIP)       of prior application No.:         Which is a:       □ Continuation       □ Divisional       □ Continuation-in-part (CIP)       of prior application No.:         Inclosed are:       Application Elements         1. ☒ Filling fee as calculated and transmitted as described below         2. ☒ Specification having       82       pages and including the following:         a. ☒ Descriptive Title of the Invention       b. ☒ Cross References to Related Applications (if applicable)         c. ☐ Statement Regarding Federally-sponsored Research/Development (if applicable)         d. ☐ Reference to Microfiche Appendix (if applicable)         e. ☒ Background of the Invention         g. ☒ Brief Description of the Drawings (if drawings filed)         h. ☒ Detailed Description         i. ☒ Claim(s) as Classified Below				Trudeau, Wa	ayne D	. Kirk, Jonath	an W. Bremme	r and Stuar	t C. Simmons		
□ Continuation       ☑ Divisional       □ Continuation-in-part (CIP)       of prior application No.:       09/690,338         Which is a:       □ Continuation       □ Divisional       □ Continuation-in-part (CIP)       of prior application No.:         Which is a:       □ Continuation       □ Divisional       □ Continuation-in-part (CIP)       of prior application No.:         Inclosed are:       Application Elements         1. ☒ Filling fee as calculated and transmitted as described below         2. ☒ Specification having       82       pages and including the following:         a. ☒ Descriptive Title of the Invention       b. ☒ Cross References to Related Applications (if applicable)         c. ☐ Statement Regarding Federally-sponsored Research/Development (if applicable)         d. ☐ Reference to Microfiche Appendix (if applicable)         e. ☒ Background of the Invention         g. ☒ Brief Description of the Drawings (if drawings filed)         h. ☒ Detailed Description         i. ☒ Claim(s) as Classified Below	f a CONT	INUZ	TION API	PI ICATION	check	annronriate h	oox and supply	the requisit	e information:	<u> </u>	<del></del>
Which is a:  Continuation Divisional Continuation-in-part (CIP) of prior application No.:  Which is a: Continuation Divisional Continuation-in-part (CIP) of prior application No.:  Application Elements  1. Filing fee as calculated and transmitted as described below  2. Specification having 82 pages and including the following:  a. Descriptive Title of the Invention  b. Cross References to Related Applications (if applicable)  c. Statement Regarding Federally-sponsored Research/Development (if applicable)  d. Reference to Microfiche Appendix (if applicable)  e. Background of the Invention  f. Brief Summary of the Invention  g. Brief Description of the Drawings (if drawings filed)  h. Claim(s) as Classified Below								·		09/69	0.338
Continuation □ Divisional □ Continuation-in-part (CIP) of prior application No.:  Which is a: □ Continuation □ Divisional □ Continuation-in-part (CIP) of prior application No.:  Inclosed are:  Application Elements  1. ☑ Filling fee as calculated and transmitted as described below  2. ☑ Specification having 82 pages and including the following:  a. ☑ Descriptive Title of the Invention  b. ☑ Cross References to Related Applications (if applicable)  c. □ Statement Regarding Federally-sponsored Research/Development (if applicable)  d. □ Reference to Microfiche Appendix (if applicable)  e. ☑ Background of the Invention  f. ☑ Brief Summary of the Invention  g. ☑ Brief Description of the Drawings (if drawings filed)  h. ☑ Detailed Description  i. ☑ Claim(s) as Classified Below					_		part (o )	or prioriar			0,000
Continuation Divisional Continuation-in-part (CIP) of prior application No:    Application Elements			ion 🗆	Divisional		Continuation	-in-part (CIP)	of prior ar	pplication No.:		
Application Elements  1.  Filing fee as calculated and transmitted as described below  2.  Specification having 82 pages and including the following:  a.  Descriptive Title of the Invention  b.  Cross References to Related Applications (if applicable)  c.  Statement Regarding Federally-sponsored Research/Development (if applicable)  d.  Reference to Microfiche Appendix (if applicable)  e.  Background of the Invention  f.  Brief Summary of the Invention  g.  Brief Description of the Drawings (if drawings filed)  h.  Detailed Description  i.  Claim(s) as Classified Below	<i>N</i> hich is a	a:								,	
Application Elements  1.  Separation Filing fee as calculated and transmitted as described below  2.  Specification having 82 pages and including the following:  a.  Descriptive Title of the Invention  b.  Cross References to Related Applications (if applicable)  c.  Statement Regarding Federally-sponsored Research/Development (if applicable)  d.  Reference to Microfiche Appendix (if applicable)  e.  Background of the Invention  f.  Brief Summary of the Invention  g.  Brief Description of the Drawings (if drawings filed)  h.  Detailed Description  i.  Claim(s) as Classified Below	☐ Cont	inuat	ion 🗀	Divisional		Continuation	-in-part (CIP)	of prior ap	pplication No.:		₽1.
Application Elements  1.  Separation Filing fee as calculated and transmitted as described below  2.  Specification having 82 pages and including the following:  a.  Descriptive Title of the Invention  b.  Cross References to Related Applications (if applicable)  c.  Statement Regarding Federally-sponsored Research/Development (if applicable)  d.  Reference to Microfiche Appendix (if applicable)  e.  Background of the Invention  f.  Brief Summary of the Invention  g.  Brief Description of the Drawings (if drawings filed)  h.  Detailed Description  i.  Claim(s) as Classified Below											
1. ☑ Filing fee as calculated and transmitted as described below  2. ☑ Specification having 82 pages and including the following:  a. ☑ Descriptive Title of the Invention  b. ☑ Cross References to Related Applications (if applicable)  c. ☐ Statement Regarding Federally-sponsored Research/Development (if applicable)  d. ☐ Reference to Microfiche Appendix (if applicable)  e. ☑ Background of the Invention  f. ☑ Brief Summary of the Invention  g. ☑ Brief Description of the Drawings (if drawings filed)  h. ☑ Detailed Description  i. ☑ Claim(s) as Classified Below	Enclosed a	are:				A			ę.,		
2. ☑ Specification having 82 pages and including the following:  a. ☑ Descriptive Title of the Invention  b. ☑ Cross References to Related Applications (if applicable)  c. ☐ Statement Regarding Federally-sponsored Research/Development (if applicable)  d. ☐ Reference to Microfiche Appendix (if applicable)  e. ☒ Background of the Invention  f. ☒ Brief Summary of the Invention  g. ☒ Brief Description of the Drawings (if drawings filed)  h. ☒ Detailed Description  i. ☒ Claim(s) as Classified Below						Application	n Elements				
a. ☑ Descriptive Title of the Invention  b. ☑ Cross References to Related Applications (if applicable)  c. ☐ Statement Regarding Federally-sponsored Research/Development (if applicable)  d. ☐ Reference to Microfiche Appendix (if applicable)  e. ☒ Background of the Invention  f. ☒ Brief Summary of the Invention  g. ☒ Brief Description of the Drawings (if drawings filed)  h. ☒ Detailed Description  i. ☒ Claim(s) as Classified Below	1. 🛚	Filir	ig fee as c	alculated and	d trans	mitted as des	cribed below		A	5	;
<ul> <li>b. ⊠ Cross References to Related Applications (if applicable)</li> <li>c. □ Statement Regarding Federally-sponsored Research/Development (if applicable)</li> <li>d. □ Reference to Microfiche Appendix (if applicable)</li> <li>e. ☒ Background of the Invention</li> <li>f. ☒ Brief Summary of the Invention</li> <li>g. ☒ Brief Description of the Drawings (if drawings filed)</li> <li>h. ☒ Detailed Description</li> <li>i. ☒ Claim(s) as Classified Below</li> </ul>	2.	Spe	cification h	having		82	pages and ir	ncluding the	following:		
<ul> <li>b. ⊠ Cross References to Related Applications (if applicable)</li> <li>c. □ Statement Regarding Federally-sponsored Research/Development (if applicable)</li> <li>d. □ Reference to Microfiche Appendix (if applicable)</li> <li>e. ☒ Background of the Invention</li> <li>f. ☒ Brief Summary of the Invention</li> <li>g. ☒ Brief Description of the Drawings (if drawings filed)</li> <li>h. ☒ Detailed Description</li> <li>i. ☒ Claim(s) as Classified Below</li> </ul>		<b>673</b>									
<ul> <li>c. □ Statement Regarding Federally-sponsored Research/Development (if applicable)</li> <li>d. □ Reference to Microfiche Appendix (if applicable)</li> <li>e. ☒ Background of the Invention</li> <li>f. ☒ Brief Summary of the Invention</li> <li>g. ☒ Brief Description of the Drawings (if drawings filed)</li> <li>h. ☒ Detailed Description</li> <li>i. ☒ Claim(s) as Classified Below</li> </ul>			,							ŧ	-15
<ul> <li>d. ☐ Reference to Microfiche Appendix (if applicable)</li> <li>e. ☒ Background of the Invention</li> <li>f. ☒ Brief Summary of the Invention</li> <li>g. ☒ Brief Description of the Drawings (if drawings filed)</li> <li>h. ☒ Detailed Description</li> <li>i. ☒ Claim(s) as Classified Below</li> </ul>	b.	×							4	:	a <sup>†</sup> *
e. ☒ Background of the Invention  f. ☒ Brief Summary of the Invention  g. ☒ Brief Description of the Drawings (if drawings filed)  h. ☒ Detailed Description  i. ☒ Claim(s) as Classified Below	C.		Statemer	nt Regarding	Feder	ally-sponsore	d Research/De	velopment	(if applicable)	٠,٠	÷
f. ☒ Brief Summary of the Invention  g. ☒ Brief Description of the Drawings (if drawings filed)  h. ☒ Detailed Description  i. ☒ Claim(s) as Classified Below	. <b>d</b> .		Referenc	e to Microficl	he App	pendix (if appl	icable)				š
g. ☑ Brief Description of the Drawings (if drawings filed)  h. ☑ Detailed Description  i. ☑ Claim(s) as Classified Below	<b>e</b> .,	X	Backgrou	and of the Inv	ention	1					٠
h. ☑ Detailed Description  i. ☑ Claim(s) as Classified Below	f.	X	Brief Sun	nmary of the	Invent	tion					
i. 🗵 Claim(s) as Classified Below	g.	$\boxtimes$	Brief Des	cription of the	e Drav	vings <i>(if drawi</i>	ngs filed)				
	h.	$\boxtimes$	Detailed l	Description							
j. 🗵 Abstract of the Disclosure	i.	$\boxtimes$	Claim(s)	as Classified	Belov	v					
	i.	×									

# UTILITY PATENT APPLICATION TRANSMITTAL (Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No. 003449.0012

Total Pages in this Submission

3.	$\boxtimes$	Drawing(s) (when necessary as prescribed by 35 USC 113)								
	a.	X	Formal	Num	ber of Sheets _	20				
	b.		Informal	Num	ber of Sheets _	· · · · · · · · · · · · · · · · · · ·				
4.	X	Oat	th or Declarati	on						
	a.		Newly execu	uted <i>(original</i>	or copy)	Unexecute	ed		7	
	b.	X	Copy from a	prior applica	tion (37 CFR 1.6	3(d)) (for cont	inuation/divisio	nal applica	tion only)	
	C.	X	With Power	of Attorney	☐ Without F	ower of Attor	rney		- 1	
•	d.		Signed state	OF INVENTO ement attache R. 1.63(d)(2)	d deleting invent	or(s) named	in the prior ap	plication,	*	4 5 (
5.		The Box	e entire disclos	sure of the pridered as be	sable if Box 4b is ior application, froing part of the openion.	om which a c				
6.		Cor	mputer Progra	m in Microfic	he (Appendix)	÷	• • .		, v	
7.		Nuc	cleotide and/or	r Amino Acid	Sequence Subm	ission <i>(if app</i>	licable, all mu	st be inclu	ided)	r.
-	a.		Paper Copy		V	-		;	9. 	
	b.		Computer R	eadable Copy	(identical to cor	nputer copy)		ż	the state of	v *.
	C.		Statement V	erifying Ident	ical Paper and C	omputer Rea	dable Copy		1 1 200	
·:				,	Accompanying A	Application	Parts			
8.		Ass	signment Pape	ers (cover she	eet & document(s	))			eg c	
9.		37 (	CFR 3.73(B) S	Statement (wl	hen there is an as	ssignee)				
10.		Eng	glish Translatio	on Document	(if applicable)					
11.	×	Info	rmation Disclo	osure Statem	ent/PTO-1449	☐ Copie	s of IDS Citati	ons		
12.	×	Pre	liminary Amen	ndment			•			
13.	×	Ack	nowledgment	postcard						
14.	×	Cer	tificate of Mail	ing						
			First Class		s Mail (Specify L	abel No.): <u>F</u>	L494552363U	s		

**Application Elements (Continued)** 

of the application.

# UTILITY PATENT APPLICATION TRANSMITTAL (Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No. 003449.0012

Total Pages in this Submission

	Accompanying Application Parts (Continued)						
15.		Certified Copy of Priority Document(s) (if foreign priority is claimed)					
16.		Additional Enclosures (please identify below):					
		Request That Application Not Be Published Pursuant To 35 U.S.C. 122(b)(2)					
17.		Pursuant to 35 U.S.C. 122(b)(2), Applicant hereby requests that this patent application not be published pursuant to 35 U.S.C. 122(b)(1). Applicant hereby certifies that the invention disclosed in					

#### Warning

this application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing

An applicant who makes a request not to publish, but who subsequently files in a foreign country or under a multilateral international agreement specified in 35 U.S.C. 122(b)(2)(B)(i), must notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.

# UTILITY PATENT APPLICATION TRANSMITTAL (Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No. 003449.0012

Total Pages in this Submission

Fee Calculation and Transmit
------------------------------

#### **CLAIMS AS FILED** For #Filed #Allowed #Extra Rate Fee \$666.00 Total Claims 57 - 20 = 37 \$18.00 2 Indep. Claims - 3 = 0 \$0.00 \$80.00 Multiple Dependent Claims (check if applicable) \$0.00 \$710.00 **BASIC FEE** \$0.00 OTHER FEE (specify purpose) **TOTAL FILING FEE** \$1,376.00 A check in the amount of \$1,376.00 to cover the filing fee is enclosed. ☑ The Commissioner is hereby authorized to charge and credit Deposit Account No. 50-1631 as described below. A duplicate copy of this sheet is enclosed. ☐ Charge the amount of as filing fee. Credit any overpayment. ☑ Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17. ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b). Mark D. Giarratana (Reg. No. 32,615) Dated: October 16, 2001 George N. Chaclas (Reg. No. 46,608) Cummings & Lockwood Granite Square, 700 State Street, P.O. Box 1960 New Haven, CT 06509-1960 Phone No.: (860) 275-6719 Fax No.: (860) 560-5919 CC:

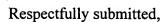
### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ı	
Applicants:	)
	) Group Art Unit: To Be Assigned
Michael O'Neill et al.	
	) Examiner: To Be Assigned
on	)
A FIBER-REINFORCED	)
COMPOSITE STRUCTURE	)
	)
Application Serial Number: To Be Assigned	)
	) (Docket No. 003449.0012)
Filed On: Herewith	)
BOX PATENT APPLICATION	
Commissioner for Patents	
Washington, D.C. 20231	
"Express Mail" mailing label num Date of Deposit: October 16, 200	
I hereby certify that the attached patent ap	plication consisting of 82 pages of
Specification (including 15 pages of Claims (2 inc	
Abstract); Formal Drawings (20 pages); Declarati	
(unexecuted); Patent Transmittal letter; Prelimina	
Statement; one check for \$1,376.00 to cover the a	•

Kristin L. Apuzzo
(Typed or printed name of person mailing paper or fee)

(Signature of person mailing paper or fee)

are being deposited with the United States Postal Service "Express Mail Post Office To Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to: BOX PATENT APPLICATION, Commissioner for Patents, Washington, D.C. 20231.



Date: October 16, 2001

George N. Chaclas, Reg. No. 46,608 Mark D. Giarratana, Reg. No. 32,615 Attorney for Applicants

### PTO Correspondence Address:

Cummings & Lockwood Granite Square 700 State Street P.O. Box 1960 New Haven, CT 06509-1960 Phone: (860) 275-6719

Phone: (860) 275-671 Fax: (860) 560-5919

.HrtLib1:376947.1 10/16/01